

Canberra

Amiga

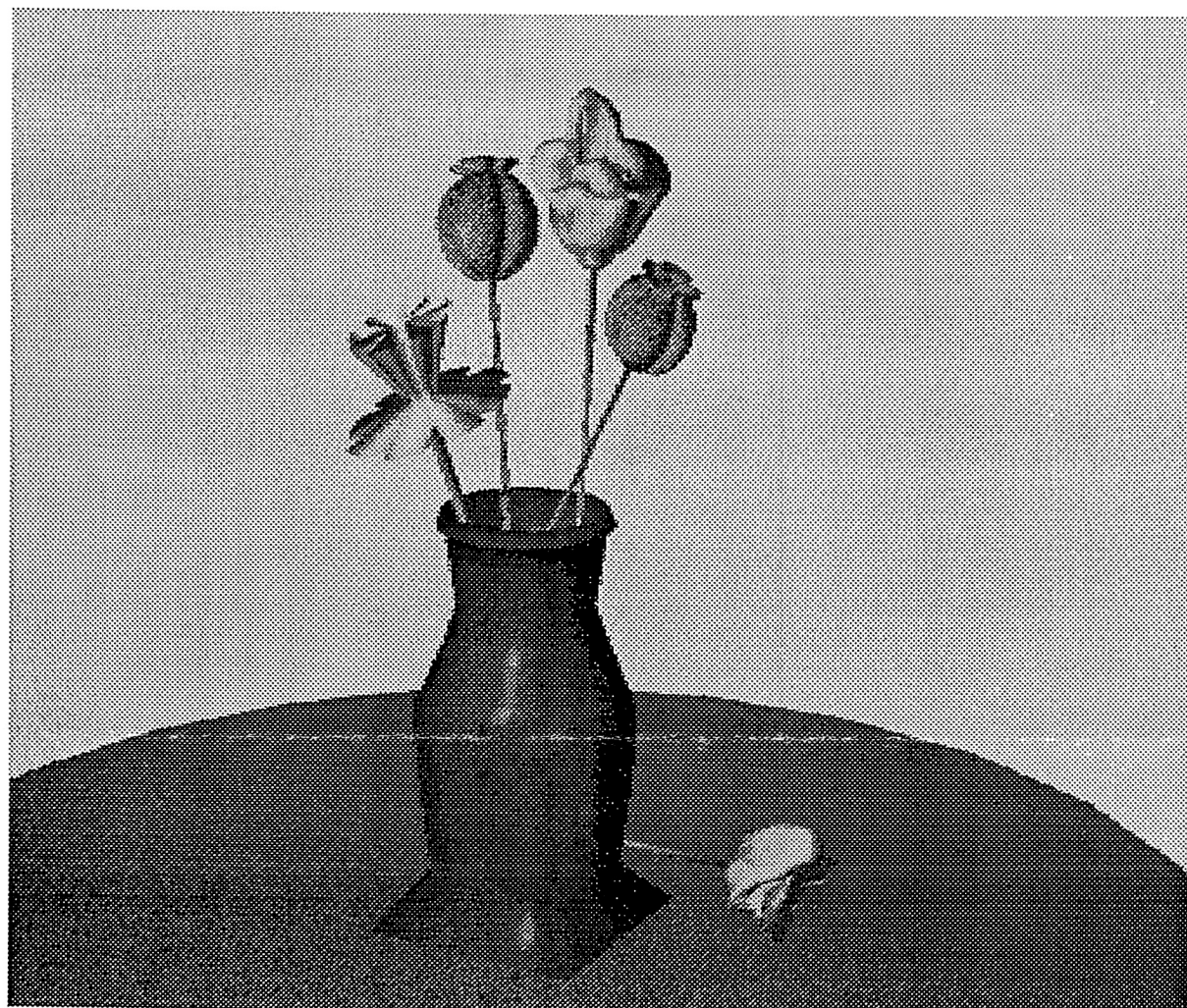
Users'

Society

Inc



May
1994



Frontier - Elite II • EGS Spectrum 28/24
Using Your Amiga • Graphics Viewers
Bars & Pipes Professional

Canberra Amiga Users' Society Inc

Aims of the Society

Canberra Amiga Users Society Incorporated (CAUS) is an independent group (currently with about 120 members) formed for the benefit of people who own, use or are interested in the Commodore Amiga computer.

Benefits

Benefits include a bi-monthly newsletter, monthly meetings, discounts, a bulletin board, Public Domain library, special interest groups (SIGs) and the opportunity to meet and exchange ideas with other Amiga users.

Subscriptions

Membership of the Society is available for an annual fee of \$20. This fee may be paid, with a filled-in application form, either at any of the monthly meetings or by mail to the Membership Secretary, PO Box 596, Canberra 2601.

Bulletin board

The CAUS bulletin board is online 24 hours and is maintained by our Sysop Darrell Cowan and his team. To be a member of the bulletin board, you need to pay \$5.00 additional yearly subscription. The telephone number of the bulletin board is 292-1054.

Meetings

Meetings are held at 8 pm on the second Thursday of each month in either the Chifley Room or the auditorium at the Canberra Workers' Club in Childers St, Civic. The dates for the next few meetings are 12 May, 9 June and 14 July. Members are welcome to use all Workers' Club amenities on the night (as long as you are signed in).

The Beginners' Group runs from 7-7:45pm prior to each meeting.

Details of upcoming meetings and main topics will be advertised in the Canberra Times "Fridge Door" the week of the meeting.

Newsletter Contributions

beCAUS is produced bi-monthly. Contributions to the newsletter can be submitted to the Editor via the newsletter area of the bulletin board, at the monthly meetings or to The Editor, PO Box 596, Canberra 2601.

Articles, reviews, comments and graphics are always welcome. The next newsletter is due out by the May 1994 meeting. The deadline for contributions to the newsletter is the end of the month preceding production. All contributions should be accompanied by the author's name and contact details. We reserve the right to refuse, disclaim and/or edit contributions.

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596 Canberra 2601."

Advertising Rates

	Full	Half	Quarter
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Inside back	\$49	\$39	\$19
Back cover	\$74	\$59	\$29
	A4	A5	A6
Flyer inserts	\$39	\$29	
Artworks	\$39	\$29	\$19

Copy is to be provided to the editor either in Amiga graphic file format or as appropriately sized printed copy.

Production

The Editor for this newsletter was Darryl Hartwig. The copy was formatted using Professional Page v4.1 and the masters were printed on a Postscript printer by Desktop Utilities. The offset printing was done by Tuggeranong Print. The collating and mailing was done by the DTP SIG.

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Front Cover

I haven't had an awful lot of response from readers (actually, none) regarding placing their artwork on the front cover, so again, I've placed one of my own there.

This picture was generated using Imagine 2.0 and converted to gray using The Art Department (as I can't seem to load HAM images into PP4!).

Artwork was based on a tutorial out of *Amiga Format*.

CAUS Committee (1994/5)

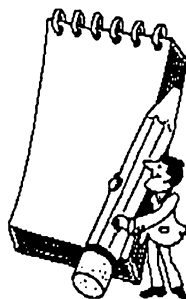
President	Steve Kennedy	254-6711(h) 6-8pm
Vice President	Michael O'Sullivan	268-8111(h) 6-8pm
Secretary	Ursula White	281-1872(h) 6-8pm
M'ship Sec.	Mathew Taylor	241-8892(h) 6-8pm
Treasurer	Clinton Sleath	251-2390(h) 6-8pm
Editor	Darryl Hartwig	293-2347(h) 6-8pm
Property Officer	Joe McCully	255-2128(h)
Committee	Andrew White	281-1872(h)
	James McPhee	251-5202(h)
	Loy Winkler	4-10pm

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Editorial

Hello! I'm back! It seems no-one else applied for the editorial position, so I'm back putting out our favourite magazine. The AGM 1994 was a successful meeting; all the committee positions were filled, and if the first committee meeting was anything to go by, this year should be a good 'un!



Mathew (our returned Membership Secretary) has another tutorial in this issue - let him know if he's wasting his time or not. If there are any subjects you'd like covered (preferably dealing with the Amiga!), give him a ring (or see him at the meetings).

Check out the 'Whats Happening' on the back page for little bits and pieces of interesting information that you can't possibly do without. The new committee is displayed on page 2.

On a sad note, the committee wishes to extend their condolences to the family and friends of Lawrence Coombs (our head PD librarian who passed away recently). We thank him for all his hard work in the previous years.

Back to a brighter note: this club is on the way back, but we need help from our membership to keep this club alive and kicking! Anyway, 'til next time, Ciao and keep Amiga'ing!
Darryl Hartwig

President's Message

Hi there!

My name is Steve Kennedy, I'm the new president of C.A.U.S. I'm 30 years old and have owned an Amiga for near on five years. I've been to quite a few of the user group meetings over the years which have been a lot of fun and informative on the ins and outs of the Amiga. Also I've been involved in the hardware SIG having done 12 years in the R.A.N. as a fully qualified radio technician.

Having used an A500 for the last 5 year in various configurations, eg. with a half meg of memory, with 1 to 2.5 megs of memory and IDE internal hard drive. I am presently using an A2000 with 2.5 megs memory and 120 meg SCSI hard drive. I have done various repairs, and hardware hacks to my own machine and to other people's machines. So I hope that people will be happy to come to me and ask questions on both hardware or software, if I can not help, I or one of the committee will be able to put you on to someone that can.

I see the aims of the group being to help promote the Amiga to people, (even the Icky Blue Muck (IBM) users) and provide assistance to Amiga Amigos. The future of this wonderful computer is very bright!! even in light of the recent problems of CBM (AUST). Now with COMMODORE Asia Pacific in charge we should see a change in the marketing of the AMIGA line including the CD-32, which outstrips any other games/computer setup in the world. To do this we need your help in the way of stand alone demos that we can use in places like Grace Brothers.

SO LETS SEE YOUR DEMOS!!!

The upcoming meetings are going to be GREAT FUN!! At the MAY meeting it's going to be HARDWARE on display (things like) accelerators, handscanners, memory expansion, harddrive interfaces, parnet, among other things. The

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Professional Software
call your dealer!

ARexx Cookbook

Tutorial approach step by step
Useful projects that perform worthwhile tasks
ARexx and Postscript explained
Index cross-referencing with Hawes & Commodore manuals

Opus 4.1 /CanDo 2.51

All upgrades and tech support for Australian users through Desktop Utilities - registration \$15 for Opus and \$30 for CanDo, free for users whose packages came with DTU registration form

Contact 2.1

Puts you in touch, instantly

New version - a page and a half of new features! This personal information manager will give you fast and easy access to addresses, phone numbers etc. Configurable modem device & dial prefix to select your preferred phone carrier at any time.

MathsMaster II

*Another new release!
Now with mixed module combining addition, subtraction, multiplication and addition, and a high score table. For primary ages - maths games.*

Desktop Utilities

PO Box 3053, Manuka, ACT 2603
Phone (06) 239 6658 Fax 239 6619 BBS 239 6659

Bars & Pipes Professional V2.0

Bars and Pipes Professional is one of the Amiga's most advanced MIDI sequencing programs. The newest version has added many multimedia capabilities.

INTRODUCTION

I will concentrate on the sequencing capabilities, because I'm not so interested in building my own multimedia presentations. BPPro is a sequencer with thousands of functions and many original ideas. It's not as conventional as Dr. T's Keyboard Controlled Sequencer (KCS) and is not a "tracker" program.

REVIEW

A couple of years ago, I had a quick look at the original Bars and Pipes Pro. It looked fine and powerful, but proved a little difficult to use. I used OctaMED with my Korg M1 and it was nice to use, though music created with OctaMED sounds like... well, music created with OctaMED. Some friends recommended that I get Dr. T's KCS. I gave it a chance, but everything had to be done with numbers. "I had enough of mathematics in High School" I thought and deleted KCS from my hard drive.

A few months ago, I decided to buy BPPro II. It came and I had a quick look at it. It looked even more fine and powerful, but without reading the manual it was really difficult to use. So I read the manual, and the program started opening to me.

Basically, BPPro works just like any other sequencer. One has an unlimited amount of tracks to record on. Any track can use any MIDI channel. But that's as conventional as BPPro gets. Every track has its own pipeline with a "valve". The valve controls the musical flow. The pipe can be connected to three parts: the MIDI-in part, the note part, and the MIDI-out part. When you record music, the notes go through the MIDI-in part and get to the note part. When BPPro plays the notes, they go through the MIDI-out part.

Why all these parts? The most powerful little things in BPPro are called Tools. Tools are modules, separate from BPPro, that are used for tasks like transposing, quantization, echoing, and even unquantization! There

are dozens of tools in the program, and I have only tried a few of them. If one puts a tool just before the note part of the pipe, every note recorded will be processed with that tool. But if one places the tool in the MIDI-out part, the notes will be recorded unchanged and then processed every time they go to MIDI-out. One can place many tools into every pipeline, and thus it's very easy to try different quantizations and transpositions.

There can be dozens of windows open, and one can change parameters for tools in real-time while the song plays.

Accessories are a bit like tools, but they cannot be placed on the pipeline. Accessories are also modules and control BPPro's extensive ARexx functions; Standard MIDI File importing and exporting, and system exclusive recording, among other things. They are like programs that open on BPPro's screen.

There are many ways to edit the recorded piece of music. When one double-clicks on the track, an editing window opens. Here one can select classical notation (which can be printed), hybrid (which shows notes as lines), piano-roll, guitar tablature (for guitar freaks) or list editing. I find hybrid the easiest way for editing the notes. One edits the music with a wand, hand, and other editing tools (these are not the Tools explained above). With the hand, one grabs notes and drags them to new positions. The wand alters lengths. Rubber

would like to have the tempo line relative to the selected "main" tempo; i.e., if I changed the main tempo from 125 BPM to 120 BPM, the tempo line also should drop by 5 BPM.

Also, mixing is easy. The Mix Maestro window has sliders and knobs for every channel in the song, and movements of these gadgets can be recorded in real time. The knob usually controls panning (MIDI controller number 10) but you can change it to control something else. (Panning doesn't work with the Korg M1, by the way.). The slider works like the volume slider in a mixing board and usually affects MIDI volume (MIDI controller number 7).

Song Construction is a nice window. Here you can break your song into named sections (A, B, C, etc.) and put the sections in any order you wish.

The multimedia support is extensive with full SMPTE support. It also has support for Scala, the Video Toaster, Sunrise AD516 card, and its own slide show program. The SMPTE tracks can be set to real-time mode. Real-time tracks do not react to tempo changes.

Every track can have its own time signature. This can create really exciting results, I think (I haven't tried this yet).

DOCUMENTATION

Documentation is in a bound manual almost 400 pages long. It is a bit boring to read (I didn't expect a best-seller, but...) and it lacks a tutorial. This isn't so nice, because the program has many, many functions and you don't learn them just by reading. But the easiest way to learn how to use this program is simply to use the program.

LIKES

- Tools are a wonderful invention. I can change my music in almost every way I like without destroying the original recording. Non-destructive editing rules!
- Hybrid editing works fine.
- BPPro can record System exclusive dumps long "enough", whereas KCS is limited to 16 KB only.

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*multimedia
support is
extensive*

deletes notes, and Pen creates new ones. Hard parts of a song can be recorded by step editing.

Editing the tempo is very easy. You draw a tempo line onto the tempo map with the mouse. You can easily create linear, sudden, or exponential tempo changes. My only complaint is that I

Frontier - Elite II

BRIEF DESCRIPTION

Frontier is a space exploration/ trading/shoot-em-up game that is a sequel to "Elite," a very successful program available for a number of computing platforms.

COMPANY INFORMATION

GameTek UK (Konami is also mentioned)

HARDWARE REQUIREMENTS

1 MB of RAM is required. Works with all Amigas. 68020 CPU and upwards provide smoother animations and better detail, but the gameplay is supposedly the same on any CPU.

SOFTWARE REQUIREMENTS

Works under all Kickstart versions. The program does not use the operating system, and will not multitask. The program requires a stack of at least 70,000 bytes, but most people feel safer with a stack setting of 100,000 bytes.

COPY PROTECTION

"Look up a word in the manual" protection. The program is hard drive installable, but works from floppies. The program is a single executable.

Save-game data can be saved on any read/write device. (Floppy, hard drive, recoverable RAM disk, etc.)

The copy protection mechanism gets a rating of "acceptable": you notice it,

but it is not too bad.

INSTALLATION

The program may be played by booting on the master floppy disk, or it can be copied to the hard disk by any normal Amiga mechanism (drop the icon, use the Copy command, or use a directory utility program such as Directory Opus).

This is a very simple operation. Anyone who has used an Amiga for more than 30 minutes should be able to cope. I created a Frontier directory on my GAMES: partition, and copied the executable and the six "saved game" files into this directory.

REVIEW

Years ago, my father raved about a game he was playing called Elite. I didn't take much notice, at the time, until I saw it available for the Amiga. I purchased it and was entranced. Although I didn't get anywhere near the rank of Elite, due to an unfortunate conflict between the game and my Amiga 1000, I did have a great deal of fun and "wasted" many hours playing the game.

Late in 1992, the British computing magazine "The One" had an interview with David Braben, the programmer of Elite, and revealed that he was working on the successor to Elite, with the inspiring title of "Elite II." The working title was revised to be "Frontier" sometime in late 1992.

Eventually, news came from people who had actually seen and played the

game. The rush was on; and after a few weeks of scouring the local scene, I finally acquired a copy from a local computer software shop. The installation was a breeze; once done, I put the original disks away in their box, and set about playing the game.

Commander Dac, in charge of his shiny inherited Eagle Long Range fighter, snapped into existence. Firing away with his powerful engines, he took off from the spaceport on the planet Ross, and was promptly shot down by hordes of angry police ships, sent by a militant base commander who was offended by my lack of manners in not asking for take off clearance.

Game time: two minutes. Real time: five minutes. And I was toast. A quick succession of restarting the game, and wild attempts to evade authority always ended up with my being declared a criminal and getting shot down by the atrociously piloted police ships. I decided that asking for clearance to take off isn't just a formality, it's the LAW. Later on in the game, when I accrued some fines for doing something considered illegal, I managed to evade the police ships and escape; however, I was spontaneously killed for not obeying the police, whilst minding my own business beside an asteroid, trying to blow it to smithereens. The moral is PAY YOUR FINES! The game isn't lenient here: you either pay your fines, or you die.

(continued on page 6)

Help Service

The following is a list of members who have volunteered to share their knowledge and experience with other members. If you have a problem or just need a bit of advice in any of the areas listed, please ring during the hours shown.

What's happening	Paul Martin	10-10 M-Su	253-2121
General Help	Joe McCully	6-12pm M-Su	255-2128
	Andrew White	6-8pm M-F	281-1872
	Gordon Owtrim	7-10pm M-Su	297-2692
	Neil Squires	7-10pm M-F 10-9 Sa-Su	259-1128
Hard disks, Digiview	Simon Tow	6-7pm M-F	288-8362
Laser printing	Frank Keighley	6-7pm M-F	239-6658
Desktop Publishing	Frank Keighley	6-7pm M-F	239-6658
	Darryl Hartwig	6-8pm M-Th	293-2347
Desktop Video	Andre Hogie	6-8pm M-F	290-2474
Beginners AmigaDOS	Mathew Taylor	6-8pm M-Su	241-8892
ProWrite	Darryl Hartwig	6-8pm M-Th	293-2347
Amos	Bernie Wiemers	6-8pm	248-9837
Superbase Wordperfect	Andrew Boundy	8-10pm M-Th	291-6971
C	Joe McCully	7-10pm M-F	255-2128
Hardware	Mathew Taylor	6-8pm M-Su	241-8892

Please contact the editor with updates to this list.

Frontier - Elite II

(continued from page 5)

Frontier is based on the same principles as Elite. You have a spaceship with a Hyperdrive, and you carry cargo from one planet or spaceport to another, hoping to make a profit in the process. On the way, you meet with other spacefarers, most of whom look at you and decide that you're easy pickings, and start shooting first. They do not desist until you obliterate them or they destroy you. Space combat is an integral part of the game. During the early stages it is very difficult to fight other spaceships - your firepower is limited to a 1-MWatt pulse laser that fires once every 5/8ths of a second, and you have no shields to protect you from the clumsy pilots of other spaceships.

Later, combat becomes less life-threatening and more tedious. With a 20-MWatt beam laser, you rarely get touched before you've atomised any prospective opponents. However, "rarely" doesn't mean "never." Sometimes, you get only a blip of a warning, and you're suddenly breathing space, and the dreaded "Game Over" tombstone is on your screen.

Tactics and weaponry play an important part in the game. I find combat to be quite a simple affair these days with my 4-MWatt continuous beam laser. Some people think combat is too easy, and they even go back to 1-MWatt pulse lasers to have some challenge. I think they're ego-tripping though.

Getting to where you want to go is one of the main problems with Elite. Your interplanetary systems can get you going only a few thousand kilometres per second. Distances within solar systems are realistically portrayed in Astronomical Units or AU's (one AU is the distance from the Earth to the Sun, or about 150,000,000 kilometres). Travelling more than 50 AU's is a tedious process.

The system map is a scalable, three-dimensional representation of the various stars, planets, satellites and space stations in your star system. The mouse controls your point of view. Zooming is accomplished using the function keys F7 or F8, or by clicking on their icons on the screen. Everything "works" in the system map - you can watch moons orbiting planets, and planets orbiting stars, and other spaceships going about their business. All of this functionality is fairly intuitive. Braben has supplied an option to re-

verse the left/right up/down function of the mouse if "real motion" confuses you. You can zoom in to look at planets, and then look at the surface of the planet and see starports. Orbital starports or orbital cities are also displayed, with movement in real or accelerated time so you can plan how to get there in the least amount of time.

Frontier's galactic map is huge. The galaxy is about 75,000 light years across in this game, and the central part of the galaxy has many star systems within a light year of each other. Navigation is fairly simple, but there doesn't seem to be much out there to look for outside of the Core systems and the Imperial sector.

The responsiveness when updating in the system display is very pleasing. Details such as gas-giant rings are visible, with background scenery (space dust, stars, motion indicators) selectable on or off, in the main program options page.

*... was promptly
shot down by
hordes of angry
police ships.*

Zooming in on planets, asteroids, space stations or other spaceships is all possible. So is communication, but this aspect of the game is very limited.

The premise of Frontier is trading between the two star-faring groups - the Core Systems, centred on Sol, and the Imperial Systems, centred on Achenar. The Imperials are wholly capitalist: almost nothing is banned, and police protection must be purchased. Lots of contraband items are available - drugs, slaves, weapons - and life can get hectic, due to the increased pirate activity in Imperial space. The Core systems are more "refined" and actively clamp down on drug-runners and slave dealers. Do not go to a Core system with a hold full of slaves!

Each faction has a ratings system - the Imperial side choosing serfs, squires, prince and that sort of thing, whilst the Core systems have Colonels and Majors etc. Acquiring medals, awards, and passes is almost essential to advance in the game.

Ship types are many and varied, ranging from 4 tonne planet hoppers, with only interplanetary drives, to 2,000 tonne cargo behemoths (which turn really slowly, and chew through fuel like it was going out of fashion).

A very large ship will cost you about 500,000 credits. Considering you start off with 100 credits, this might take a while to acquire (if it weren't for the bugs... see below).

Some trade runs are extremely profitable, and these sort of runs will be your bread and butter for the first few hours of the game. You upgrade your ship with bigger and better weapons, defenses, and add-ons such as scanners, radar viewers for scanning other ships, Electronic Counter Measures to foil missiles, automatic hull repair systems, and Large Plasma Accelerators (weighing in at 900 tonnes!).

The game supplies you with a seemingly endless stream of hopelessly piloted enemies who seek to destroy your ship. With adequate shields and a steady hand, you can wipe out most opposition easily. But not all opponents are braindead. Some are plain deadly, and running away would be the best option when you encounter them with their shielded ships and 20-MWatt beam lasers.

Frontier has a huge scope, but most players I know have expressed some disappointment that 99% of the galaxy is either unexplored or uninhabited.

In this review, I haven't discussed the special missions you can take, the "small parcel" deliveries, paid passenger services, assassination offers, military missions, mining asteroids, mining planets, blowing up Lynx bulk Ore carriers, the way the police Vipers tend to crash into each other, the penalty for not having atmospheric shields, or how simple it is to die repeatedly in situations that are seemingly standard fare. I do hope I've given some useful information to some people though.

The bugs can be irritating. The flight simulation is excellently handled with Braben's smooth 3D graphics engine. I like this game a lot, and recommend that any ex-Elite players check out this game.

DOCUMENTATION

Frontier comes with three manuals and a quick reference card. A reference manual, 106 pages long, provides most of the information about how the program interface works, and a guide to what functions are available, enhancements and upgrades to ships, weaponry, and miscellaneous devices.

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Bars & Pipes Professional

(continued from page 4)

- Importing and exporting MIDI files is easy.
- BPPro is expandable; for example, SuperJAM! can be integrated.

DISLIKES

- There's no direct, good support for Amiga's 8-bit samples. A tool called "SamplePhone" does play samples, but every sample plays only on one pitch.
- Step recording should have a quick access to note lengths. For example, F1 should create a whole note, and F5 a sixteenth note.
- I would like to see more extensive pattern support.

COMPARISON TO OTHER SIMILAR PRODUCTS

I've tried to use KCS but it seemed far too ugly and difficult to use.

I'm a beta-tester for OctaMED Professional and have been using that program for over two years now. The direct tracker style is good for "computer music styles" like techno, not for "living" music. Also it's very difficult to export songs from OctaMED to other sequencers. Nowadays I mainly use BPPro.

BUGS

The printing of the notes is quite buggy. Sometimes, notes are printed without their stems.

When I save extra-hires notes into an IFF file with the Save command, BPPro tends to go into "fireworks mode" (crash) very often. Also normal printing sometimes crashes.

The hybrid editor usually works fine, but the notation editor has zillions of bugs. The notating resolution does nothing, and sometimes BPPro won't even show the notes (staff centering doesn't work).

The punch-in recording should start playing one measure before the selected point, and then switch on recording. For about two weeks, it always started directly on the punch-in point. Now it works fine, though. Very strange.

I had some trouble a while ago, when the program used to crash almost every time I started it... and if it did start, it still crashed in a few seconds. I re-installed BPPro and tried about everything, but nothing helped. Then I realized the problem: I had my Video Backup System on the serial port, and it constantly inputs video data to the Amiga. BPPro is the first program I've seen to crash when it receives that signal.

And this one is really serious. Two times has BPPro crashed when saving the song, thus destroying both the older and newer version. That's unacceptable.

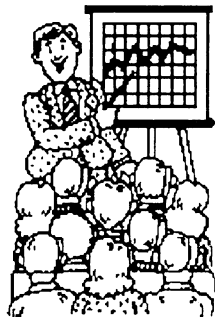
CONCLUSIONS

Despite the long list of dislikes and bugs, BPPro is a good sequencer, the best for the Amiga I think. If Blue Ribbon only fixed those bugs and added some comfortableness, this would be an almost perfect sequencer. □

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241-8892

(continued from page 3)

JUNE meeting will be about programming, just about everything from AMOS to machine code will be on show. The JULY meeting will be on MUSIC, things like MIDI, soundsampling, modules, programmes like Protracker, Sountracker, Deluxe Music Construction Set etc.

Yours in computing and fun,
Steve Kennedy
(President)

Mathew's Ravings

Hello All! First of all, a big THANKYOU for your vote of confidence at the AGM. It was pleasing to see the widespread support for my efforts thus far. I can assure you that with the incoming committee, I have much planned for the next year.

This does not mean, however, that I don't want to hear from you regarding what you feel the club could benefit from. Even phone calls of support are always welcome. Remember, the committee doesn't gain anything other than satisfaction from its efforts. Help is always welcome.

The CAUS BBS is still going strong on 292 1054. If you haven't already, why not give it a call and check it out! Leave me some mail if you have any suggestions or comments to make.

Rumours this month include an alleged buy out by a mystery company of Commodore International. The strongest hint yet is that Prudential, one of Commodore International's major creditors has made the purchase and plans to strengthen the company in

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Using Your Amiga

'The Operating System'

by Mathew Taylor

An important part of any computer system is its operating system. As the name implies, this is the software that 'operates' the computer, thus allowing you, the user, to run different software programs and achieve various tasks.

In the case of the Amiga, the operating system is called AmigaDOS. The last three letters stand for Disk Operating System. This just stems from the fact that the Amiga computer is based around floppy and hard disks. They are the basis from which information is fed into the machine and work achieved.

Owners of an Amiga are lucky, in that they can run their operating system entirely from floppy disks, if that need presents itself. Most other main-stream operating systems (I'll start calling them OS's from now on) are so bloated that they require more storage space for the basic program than is available on floppy disk.

On the other hand, AmigaDOS does not fit entirely on one disk either, as you are probably already aware. What the above means, is that enough of the system fits onto a disk to start the machine, and access other parts of the system from other disks as they are needed.

Because of this, those that have/are running from floppy disks will know that from time to time the system needs to access different disks. This leads to some disk swapping, which is some cases can get quite annoying. The solution to this problem is a hard disk.

A hard disk not only accesses information much faster than a floppy disk, but has the capacity to store much more data as well. The smallest hard drive available for your Amiga will store the equivalent of around 23 standard Amiga floppy disks. This means that you can store all the operating system and even some programs on the hard drive, making loading of the OS and any program very fast and much easier.

Well, that's where the OS is stored, but what about how it works. The OS looks after all the basic functions of the computer, so that computer programmers don't have to worry too much about how the hardware of the machine actually works. For example, writing a file to a disk is simply a matter of asking the OS to open the file, and then to write whatever information to that file. Finally the programmer asks the OS to close the file, and the job is done. The OS keeps track of what files are on the disk, and where

they all are.

The way the OS achieves this help for programmers varies depending on the task that needs to be done. There are several basic types of files that you will find on your Workbench disk that are used to create programs.

Libraries

The most common type, these files are signified by their filename ending in .library. These are special collections of code designed to help programmers with a specific job. For example, the ASL.library helps with making requesters. There are many different commands available within each library, in this example, all to do with creating and manipulating requesters.

It is not uncommon for people outside of Commodore to write libraries to enhance the OS and make other programmers jobs a bit easier. A common example of this is the ReqTools.library.

Devices

These are found in your 'devs' directory, and relate to specific hardware or software in your amiga. Devices enable the programmer to easily address the particular 'device' without worrying as much about how the device works. For example, you will find a printer.device in the devs directory. This one helps with printing functions (obviously).

Handlers

Residing in your 'L' directory, these items are a bit like devices, and allow the 'handling' of various software items. Many OS modifying programs (such as ToolsDaemon, PowerSnap)

use handlers to achieve their goals. The other important section of the OS is the utility programs that are supplied, to make the use of that OS easier for you, the user. You are probably familiar with things like the clock, calculator and the icon editor. These are all programs written to do simple things that most users of the OS will want to achieve.

An important utility supplies with AmigaDOS is the preferences program. This section of the OS is where you set up different attributes of your computer system. Under Workbench 2.x or higher, this has been replaced with a drawer with a number of little programs contained within, but the theory remains much the same. The icon for preferences is usually called 'prefs', and pictures a question mark. Double clicking on this icon will bring up either the program under 1.3 or the directory under 2.0x.

For our practical example this month, lets talk about setting up a printer using the preferences program. Under 2.0x, you have three printing icons, one for the printer itself, one for how graphics are printed, and one for postscript printing. Within the 1.3 program, most of these functions are represented as well, just click on the printer icon.

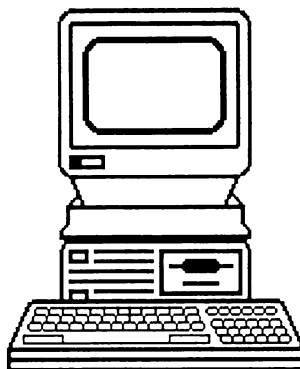
As with most Amiga programs and utilities, the preferences editor is fairly self explanatory. The following are important settings you should check when setting up a new printer:

Printer Type

This one is the most obvious, as you need to let the Amiga know what sort of printer it is using, so it knows how to talk to that printer. There are many different printers on your EXTRAS disk, and they are in the directory extras:devs/printers. You need to copy the relevant file from that directory, onto your system disk. For hard drive users,

(continued on page 12)

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Frontier - Elite II

(continued from page 6)

A 40-page "Gazetteer" contains descriptions of several dozen star systems. It also contains clues about the game.

"Stories of life on the Frontier" is 82 pages long. It contains several chapters of short stories about various characters in the game. I haven't read this manual much, but what I have read indicates that it contains clues about possible game strategies and locations of interest.

The quick reference card indicates how to start the game, what the various icons indicate, and situations in which the icons do become available. The game controls are minimally explained.

I found the documentation to be of adequate quality. Most of the information you need to play the game is buried in the game manual, which lacks an index (but does have a table of contents).

LIKES AND DISLIKES

I really liked the processor support for 68040's. The program is smooth and responsive on my computer, and works without having to disable caches, play with memory settings, or turn off the AGA chipset.

Hard disk installability was a key selling point. I'm pleased that Gametek marketed the game in this format.

I dislike the Save Game "requestor," which consists of a screen full of drive names and directories.

David Braben originally programmed the game so that it was "system clean", and would exit back to the AmigaDOS operating system when you quit the game. For some inane reason, the game was distributed with this feature disabled, so the only way to exit the game is to reboot your computer. Very unfriendly.

I am constantly disappointed with the number of program bugs that my version (1.00) has. Apparently later releases have fixed some bugs, but other bugs remain. Most can be circumvented, but some of them require you to go back to a saved game, or have the ability to ruin the gameplay, by giving you unlimited sums of money if you do certain bug-affected sequences.

BUGS

There are many bugs: far too many to enumerate. One Usenet poster was disappointed that any attempt to hyperspace into Beta Lyrae causes the program to crash.

Many people report not being able to "take off" from planetary surfaces, even though they have refueled their internal engines.

There are a number of bugs involving money. One planet "sells" usually expensive items for negative amounts of money! Take one tonne of material, and they GIVE you 3,000 credits. Very silly. Another bug lets you sell your ship for the going rate, but not complete the transfer -- you get to keep the money but

not change the ship. Do this a few hundred times, and you can make a hundred million credits in a few minutes of furious mouse-clicking. Surely ruins the game though.

One ship has an unfortunate knack of being able to aim its turret laser at itself. Excellent way to commit suicide.

There are many more. Most of them can be avoided, and the general advice given is to SAVE THE GAME a lot, unless you want undue heartache.

CONCLUSIONS

I like the game a lot. It recaptures the feel of Elite, with some upgraded graphics and a much larger galaxy to explore. I hope that David Braben comes out with the (rumoured) additions to this program, since most of the galaxy is unexplored and lifeless.

The 3D graphics engine used in the game is very smooth. The introduction sequence (available as a "Frontier Demo") is quite neat, and I'm sure it sold more than a few copies of this game.

I'd have preferred to have had a properly tested game, with the major bugs removed, but I still recommend that people go out and buy the game. It's a whole lot of fun.

COPYRIGHT NOTICE

This review is freely distributable, as long as mention of the author (David Andrew Clayton) is included with the review.

(Dac 'Average, Serf, 2M Credits, Imperial Courier.')

David Andrew Clayton.

□

CAUS Public Domain Collection

The Society's Fred Fish collection of public domain software contains a huge variety of goodies from text editors, databases, communication, graphic and music programs through to utilities, games, disks of pictures and animations and many demonstrations of commercial programs.

The following people are PD librarians:

Mathew Taylor	Palmerston	241-8892
Wayne Haesler		216-1236
Berenice Jacobs	Scullin	255-2284
Bernie Wiemers (AMOS)		248-9837

You have the choice of buying the disks or swapping them for some new acceptable NAME brand disk that you own. The copying fee for each disk (except for the FISH catalogue disk) is \$1 to cover the librarian's costs. For those who want other than the Fish collection, Berenice Jacobs holds a large collection of alternate public domain. Contact Berenice for more details.

Special Interest Groups

Each of the following members is coordinating a Special Interest Group (SIG) on the latest topics. If you are interested in joining, one of these groups and getting the best out of your Amiga, either contact them direct or bring your interest to the next monthly meeting:

Joe McCully	255-2284	C programming
Darryl Hartman	241-8892	Desktop Publishing
Andre Horne	241-8892	Video
Mathew Taylor	241-8892	E Programming
Berenice Jacobs	255-2284	AMOS programming
Wayne Haesler	216-1236	Public Domain

If you would like to start your own SIG or continue one from last year, please see a member of the committee.

EGS Spectrum 28/24

BRIEF DESCRIPTION

The EGS Spectrum is a high performance Zorro II/III graphics adapter for the Amiga series computers. It provides users with high resolution and colour depth capability.

AUTHOR/COMPANY INFORMATION

Name: Great Valley Products, Inc.

SPECIAL HARDWARE AND SOFTWARE REQUIREMENTS

- Amiga with a Zorro slot.
- AmigaDOS 2.04 or greater.
- Minimum of 2 MB of RAM.

COPY PROTECTION

None.

REVIEW

On Friday, October 8th, I received my EGS Spectrum 28/24 2MB version. This card is GREAT! I shall never yearn for AGA again. It came with the EGS system software (obviously), and some miscellaneous EGS toys like Tetris, a function plotter, and a dock program (a la ToolManager). The installation was totally painless. I just double-clicked on the install icon which invoked the C= Installer program, and away I went. A note here for those getting the board: be sure to select the Advanced User option, so that you can select between 68030 and 68000 versions of the libraries. In the Intermediate user setting, it will install the 68000 version by default. Once the installation is done, you just reboot, and POOOFF!: your Amiga has a bunch of new screen modes.

Some of the preset modes that GVP provides tend to flicker a bit too much for my taste. This is because they are designed to fit a wider range of multi-sync monitors (hence, smaller scan rate numbers). Since I have the Mitsubishi Diamondscan 1381A monitor, I used the included EGS program for designing your own screen modes, and created a virtually flicker-free 1024x768 90Hz screen mode. The included 800x600 24 bit mode is nonin-

terlaced, but the refresh rate is something like 45 Hz, so it looks worse than PAL. So, I created my own 800x600x16 mode which is rock solid. This mode is great for running EGS Paint. Speaking of which, I've played with it a bit, but not enough to really give you guys an in-depth overview. All I can say is that my first impression was very favourable. I also had a PC clone owning friend here when I installed the stuff, and when I brought up EGS paint, and loaded the included 24 bit picture, he just said "Wow, my PC sure can't do that!" I gotta tell ya, I don't usually get into these stupid MCIBTYC ("My Computer Is Better Than Your Computer") wars, but hearing that statement sure made me feel warm and fuzzy.

Finally, I want to report one annoyance. When I select any of the EGS screen modes as the default Workbench screen and reboot, all I get is a white screen. I know that Workbench is loaded because my hotkeys work (if I hit Alt-F1, a shell gets loaded). The Workbench functions just fine if I switch into the EGS mode AFTER the whole system has booted into Amiga screen mode. This problem disappeared when I switched from AmigaDOS 2.1 to 3.1 (I work for a registered developer).

Here is some new information since I posted my original review. Since then, I've installed OS 3.1 on my system as I said. My

Amiga now boots directly into 1024x768 256-colour Workbench. Note that I was not able to use 256 colours under 2.1, though some folks E-mailed me and told me that they got it to work. I should point out that the 256-colour Workbench is MUCH faster than what I've seen on an A4000 using AGA. Moving windows around is as fast as 2 bit (4 colour)

regular Amiga screen. I noticed that using WBPattern Prefs or a background picture slows the redraws down considerably, so I decided not to use it.

On software compatibility side, thus far I have tested Final Copy II, PageStream 2.2, Term 3.3, Postview 1.1, and EMPLANT. All of these programs work flawlessly in EGS screen-modes. FCII needs to run on the Workbench, but it handles the 256 colours very well. PS 2.2 also runs on the Workbench, but it does not take advantage of the colour. However, it most certainly benefits from the high resolution. Term 3.3 seems like a different program. I've always used VLT because there was nothing faster. I tried Term once before, but stopped using it, because it was slow -- well, no more. Using the screen database, I selected a 640x480 VGA screen, and it runs as fast as it normally would on a 1 or 2 bitplane screen. Postview also uses the screen database, so it was able to open its own 1024x768 screen without any problems. Finally, there's my EMPLANT. This was one of the reasons I got the card in the first place, and I am not disappointed. The Mac display emulation seems faster than our Mac IIci at the office.

CONCLUSION

After only owning the card for less than a week, I can confidently say that it's the best Amiga purchase I've ever made. This card is fast, well integrates into the current Amiga system, and truly delivers what it promises.

Originally, I was a bit jealous of my AGA equipped friends, however now I'm glad I've kept my A3000. This card really does take the Amiga "beyond AGA" as the adverts state.

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Graphic Programs

A comparison of:

- **FastJPEG 1.08**, by Christoph Feck
- **Mostra 2.0**, by Sebastiano Vigna
- **PPShow 4.0**, by Nico Francois and Rafael D'Halleweyn
- **ShowGIF 1.01**, by Christophe Passuello
- **Viewtek 1.05**, by Thomas Krehbiel

At the time of this writing, FastJPEG 1.08 was still in the beta test stage, and thus not publicly available.

BRIEF DESCRIPTION

These are all picture viewers for the Amiga. They are compared for speed and picture quality on IFF, GIF, and JPEG images. Not all the viewers support all these image file formats.

ABOUT THE TESTS

After getting the new PPShow 4.0, I decided to do a few tests of the various picture viewers available. The file formats tested are:

- **JPEG** - 24bit color JPEG. I didn't have any greyscale pictures around.
- **GIF** - 16 color and 256 color hires (~640x480) images.
- **IFF** - Hires interlaced 16 color, and lores interlaced HAM6.

NOTE: Only Viewtek and PPShow are capable of showing all these formats. Mostra shows IFF only, ShowGIF GIF only, and FastJPEG JPEG only.

I did not test IFF24, 8bit greyscale JPEG, HAM8, and other AGA modes.

IFF ILBM TESTS

Three of the programs, PPShow, Mostra and Viewtek, support IFF. PPShow was the fastest of them. With 16 color hires/laced pictures, Mostra was about 40% slower, and Viewtek about 70% slower than PPShow. With lores/laced HAM pictures, Mostra was about 20% slower than PPShow, while Viewtek was 230% slower!

GIF TESTS

Viewtek, ShowGIF, and PPShow can display GIF pictures. Of the three, ShowGIF was clearly fastest. With 16 color hires GIFs, PPShow was about 90% slower, while Viewtek was as much as 300% slower! All three programs displayed the picture on a 16 color hires screen. With 256 color pictures, Viewtek was the only one of the programs capable of color output. It did that by converting the picture to HAM for display. I could not get it to display these pictures as greyscale on a 16 color screen at all. This is what the other programs did. This time, PPShow was 160% slower than ShowGIF, while Viewtek took 760% more time to convert the picture to HAM instead of greyscale.

JPEG TESTS

JPEG format is supported by FastJPEG, PPShow, and Viewtek. Picture size and other variations seemed to have little effect on the relative speeds of the viewers. All three display 24bit color JPEGs by converting them to HAM. All three also support HAM8, even though FastJPEG has a separate version for that. At least FastJPEG and Viewtek also support greyscale (8 bit) JPEGs, but I did not test the speed of those. FastJPEG was the clear winner in this league. Not only it was the fastest, but also had the best display quality, especially noticeable in HAM6. PPShow was about 20% slower, Viewtek about 70% slower than FastJPEG. PPShow had terrible artifacting on vertical and diagonal lines with high contrast. FastJPEG, on the other hand, produced crisp lines with fairly good anti-aliasing. Viewtek output was something between these two. FastJPEG has good dithering routines, while both PPShow and Viewtek hardly seem to dither at all.

SUMMARY

See below. All times are in seconds.

Supplied by Mathew Taylor

NEWS!!!!

- PC Task by a couple of guys in Melbourne expect to release a windows version of this software to emulate Microsoft Windows.
- AmiLink have released several versions of their edit controlling software and now are supplying Montage 24 free with their new packages.
- A4000 tower now available through your nearest Commodore specialty shop.
- Hopefully we'll have a Quick-Net demo this Meeting (May).

(continued from page 7)

order to reclaim some of its outstanding debts. Another possibility was that Acer, the clone manufacturer that bought Commodore's clone line might have made the purchase. It was also rumoured that Sony was the buyer, but that rumour has been circulating for years.

Workbench 3.1, the new operating system for all Amiga models is said to be very close. Those awaiting the upgrade should hang in there, it will be here real soon now.

A prototype of the long awaited CD32 add-on for the A1200 was shown at this years CeBit, and should be available in a few months. Also at the show an A4000 was linked via its serial port to a CD32, but no true CD32 add-on was available. It is believed that the problems associated with getting the Akiko chip access to the custom chip bus via a zorro slot has stalled development of the unit.

In other CD32 news, it has been mentioned that two gadgets for this great gaming machine will become available in Australia some time during May. Photo Lite makes the CD32 Photo CD compatible and ships on one CD. The Communicator makes it possible to connect the CD32 to any Amiga and transfers data via the serial port. At the CD32 it plugs in between the keypad and the CD32. The CD32 can then be used as a double speed external CDROM.

Virus Checker is now up to version 6.41. This latest release includes the addition of a brain file to the program, making updates for new virii easier. 6.41 will be available at the next meeting of the club, or on the club BBS.

	IFF/16	IFF/HAM	GIF/16	GIF/256	JPEG/24	JPEG quality
FastJPEG	640x512	384x480	528x296	720x512	300x474	good
ShowGIF	--	--	4.6s	15.4s	--	--
PPShow	2.3s	2.5s	8.7s	39.4s	50.3s	poor
Mostra	3.2s	2.9s	--	--	--	--
Viewtek	4.0s	8.3s	18.6s	*132.2s	72.2s	fair

* Viewtek was the only one of the programs that could produce color output of 256 color GIFs on ECS machines. The time given is for that.



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What's Happening?



Upcoming Meetings

May 12: Hardware night. OpalVision, IV24, AGA, networking, laser printers, modems, RAM cards, accelerators, HD controllers, etc. See and weep! (and ask questions).

June 9: Programming evening with members who use C, E, Amos, Blitz Basic and others. Bring your own efforts along and show others what you can do.

July 14: MIDI demo. Bring along your own music package and creations. Maybe you could be the next Mozart!

Art Competition

If you'd like to see your name up in lights (or at least recognized in this mag), then submit your artwork for the front cover, and become famous. Prizes will be distributed for the best original artwork that adorns the front page. Space permitting, other artwork will be displayed inside the mag. Editor's decision will be final (he might be open to bribes). This promotion will continue depending upon your submissions. So start drawing, raytracing, etc...

WOCA

World of Commodore Amiga will now be incorporated with the Home Computer Show from 10-12 June, 1994. Be there, or ... miss out!

Demo Disk

The Club is putting together a demo disk for sending out to the Grace Bros. and Brashes types of stores. What we need from *YOU* is any demos that you have done on any subject; animations, pictures you've drawn, etc, for inclusion on this disk (put your name up in lights if you wish). Send *anything* to the committee for appraisal.

Raffle

A new raffle is coming up. Tickets will go on sale in July and be drawn in November. Watch this space!

Using Your Amiga

(continued from page 8)

this is DH0:. For floppy users, this is whatever disk you choose to boot up your computer from. In most cases, this means several different disks for different applications. Whatever disks you boot from, will need the file copied to them. Make sure you enter the preferences editor after copying the file across and select the new driver.

Paper Type

This one simply refers to how the paper is fed into the printer. There are two main ways, tractor and single. Tractor paper is the computer paper you may have seen with the strips of holes down each side. These holes fit into the tractor mechanism of the printer, and mean that the printer does not need to pause for you to add paper. This setting can also be used for printers with automatic sheet feeders. Single sheet paper is just plain copy paper, and needs to be put in one sheet at a time when the printer needs it. Find out more about this in your printers manual.

Paper Size

Again, fairly obvious. You need to set the right size here so that the Amiga knows how much printing it can do on one page. Generally, you will purchase A4 size paper (the standard) and set this setting accordingly.

There are several other options that you can change yourself to see what effect, if any, they have on your printing. We might leave it at that for this month, and move onto something new for the next issue.

I received a grand total of zero responses with regard to my last tutorial article. I must admit that this was fairly discouraging as many of the newer members expressed a keen interest in these articles. So, if you want more tutorial articles, please phone me up and talk to me about what you would like to learn about. Without your input these articles will be useless. My number is 241-8892.

□